

Watershed Protection Plan Upper San Antonio River

Watershed Coordination Steering Committee
TSSWCB
March 8, 2007

DOCUMENTS

Contract and Workplan
April 28, 2005

Communication Plan
Draft – June 1, 2005
Final – September 6, 2005
Approved – October 20, 2005

Stakeholder Database
Submitted – June 1, 2005
Updated – June 15, 2006

DOCUMENTS (continued)

Quality Assurance Project Plan (QAPP)
Draft - February 15, 2006
Approved – June 15, 2006

Summary Report
Draft – July 25, 2006 (component issue)
Accepted with Final WPP – January 18, 2007

DOCUMENTS (continued)

Watershed Protection Plan (WPP)
Draft – July 13, 2006
TCEQ comments – August 23, 2006
Final – December 18, 2006
Accepted – January 18, 2007

PUBLIC EDUCATION, AWARENESS, INFORMATION and INPUT

3 Large Public Meetings

29 Presentations; Briefings; Updates

- Bexar Regional Watershed Management (BRWM) Program
 - Committee of Seven
 - Water Quality Focus Group
 - Watershed Improvement & Advisory Committee
 - Public Management Committee
- San Antonio River Oversight Committee
- Bexar County Commissioners Court
- KZEP Radio
- Other

Summary Table Nine Key Elements

1. Cause and source of bacterial impairment
2. Management measures
3. Estimated load reduction potential
4. Technical and financial assistance
5. Education component
6. **Schedule of implementation**
7. Interim measurable milestones
8. Indicators to measure progress
9. Monitoring Component

Summary Table Example

Causes and Sources of Bacterial Impairment	Management Measures and Targeted Critical Areas	Estimated Potential Load Reduction	Technical and Financial Assistance Needed for Each Measure	Education Component for Each Measure (and Other Education)	Schedule of Implementation for Each Measure	Interim Measurable Milestones for Each Measure	Indicators to Measure Progress	Monitoring Component	Responsible Entity
SAN ANTONIO ZOO POINT SOURCES: Existing Load = 6.22E+14 org/yr, Required Load Reduction = 6.21E+14 org/yr (99.9%)									
San Antonio Zoo internal Waterway	Disinfection of Zoo base flow	6.21E+14 (99%)	\$1,000,000 (depending upon disinfection alternative selected, higher if stormwater also treated)	None / optional	2007-2008	n/a	Reduction in base flow-related bacteria concentration	Monitor Zoo outfall to verify disinfection	CoSA

Summary Table Categories

- **Storm Water Point / Nonpoint Sources**
Ex: general urban runoff sources
- **San Antonio Zoo Point Source**
Ex: SA Zoo internal water way discharge
- **Direct Nonpoint Sources**
Ex: bat colony at Houston Street
- **Existing Programs**
Ex: fecal deposition collection on sidewalks

Summary of Recommended Control Measures

- Avian land deposition
- Pet land deposition
- General urban runoff sources
- San Antonio Zoo internal waterway
- San Antonio Zoo sewer
- Bat colony at Houston Street bridge
- Human origin (leaking sewer infrastructure and septic systems)
- Low River flows
- River-Walk/downtown sources (Improper waste disposal & debris)
- Animal pound wash down
- Fecal deposition collecting in streets
- Fecal deposition collecting on sidewalks
- Zoo animal husbandry wastewater
- Low River flows
- San Antonio tunnel

Storm Water Point/Nonpoint Sources – SA Zoo Point Source – Direct Nonpoint Sources – Existing Programs

MONITORING

- Routine monitoring of 14 sites - Completed
- 2 stormwater samplings event (4 sites) – 1 remaining

San Antonio River Authority Website www.sara-tx.org

- New Information
- Watershed Protection Plan
 - Scope of Work
 - Communication Plan
 - Public Meetings
 - Quality Assurance Project Plan
 - Final WPP Report